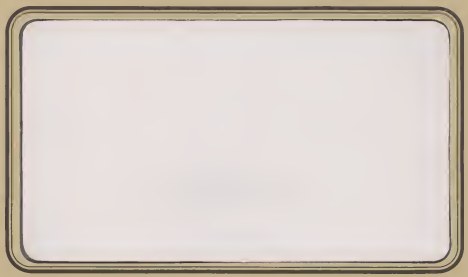
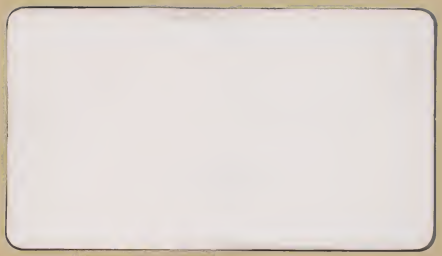
Staff Summary Series



Department of Health and Human Services
Health Care Financing Administration
Office of Research and Demonstrations



ANALYSIS OF SURVEY DATA AND PHYSICIAN PRACTICE COSTS AND INCOMES

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Health Care Financing Administration

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Teknekron Research, Inc.

Contract # HCFA-500-78-0052

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STAFF SUMMARY OF STUDY RESULTS

I. Title, Purpose

"Analysis of Survey Data and Physician Practice Costs and Incomes"

This contract was one of eight contracts which resulted from a procurement for studies that would contribute to better understanding physician practice patterns and which might thus lead to refinements in the Medicare Economic Index.

This research focused on two major tasks: (1) forecasts of aggregate physician output (visits, etc.) and revenues based on the anticipated growth in the physician stock through 1990; and (2) analyses of variations in physician practice expenses.

II. Background/Description

The Medicare Economic Index (MEI) was first implemented in 1976 as a single national Index. The weights used in the MEI were based on published American Medical Association and Medical Economics data. Unfortunately, the raw data from those sources were unavailable to Health Care Financing Administration (then part of Social Security Administration). Hence a separate survey was conducted and several projects were initiated to study those data.

The major objective of the first task under the Teknekron contract was to estimate the recent patterns of revenue and output (office visits, hospital visits, etc.) of office-based physicians. These data were then used to project the level of output and revenues for the year 1990. These projections were based on anticipated rates of growth in the U.S. physician stock available from the Bureau of Health Manpower, Public Health Services.

The second task involved the analyses of variations in the principal cost shares of rent, supplies, overhead, salaries, transportation, malpractice insurance, and net income. From such analyses one might determine the need for specialty-specific or region-specific indices.

Both tasks relied on data from the 1976-1978 HCFA Surveys of Physician Practice Costs and Incomes. The methodologies employed included extrapolation, regression, analysis, and multivariate analyses of variance.

III. Key Findings

The projections of physician activity and revenue imply that in the absence of other changes there would be an increase of 3.3 annual physician-patient contacts per person by 1990 and a 211 percent increase in nominal physician gross revenue between 1978 and 1990. This increase would be 3 percent higher were it not for the increase in both physician-population ratios and the percentage of the physician stock which is female. (These factors are both associated with lower physician-patient contacts.) The increase in the elderly population would have the effect of shifting the site of physician-patient contacts away from home visits and toward additional hospital visits.

The analyses of practice expenses indicate that there are significant differences in cost shares across region and specialty groupings. Malpractice expenses, for example, are a greater share of expenses for surgeons than for other physicians. However, in order to assess whether total practice expenses are rising disproportionately for any one group of physicians, these cost share measures must be converted to total cost inflation index measures. This conversion tends to suggest there are relatively few instances of significant variation among practice-specific cost inflation indices. Holding other things constant, interstate differences ranged up to .26 percent. Interspecialty differences were at most .75 percent.

In particular, a set of specialty-specific Medicare Economic Indices would reduce prevailings for surgeons relative to all other physicians, but the magnitude of the difference probably would not merit the administrative expense of maintaining separate indices.

IV. Analysis

Policy Issues and Implications

The results of the second task tend to validate HCFA's reliance on a single national Medicare Economic Index.

Research Implications

In the cost analyses, many of the states which exhibited statistically significant (though small) higher costs were located in the southeastern United States. This might warrant further attention. The projections produced some implausible results which suggest that current trends cannot be extrapolated. Future research might focus on developing more interactive projection models.

The statements and data contained in this internal working paper are solely those of the authors and do not express any official opinion of or endorsement by the Health Care Financing Administration.

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